

14421 County Rd. 10 • Ft. Lupton, Colorado 80621 • (303) 857-9999 • FAX (303) 857-0577 • E-MAIL Permitco 1@aol.com

FEDEX OVERNIGHT DELIVERY

January 10, 2008

Division of Oil, Gas & Mining 1594 West North Temple, Suite 1210 Box 145801 Salt Lake City, UT 84114-5801

Attn: Diana Mason

Re:

Fidelity Exploration & Production Company

Cane Creek Unit #2-2 2528' FNL and 760' FWL SW NW Section 2, T26S - R19E

Grand County, Utah

Dear Diana,

Enclosed please find two copies of the application for permit to drill for the subject well along with the required attachments.

If you should need additional information, please don't hesitate to contact me.

Sincerely,

PERMITCO INC.

Venessa Langmacher

Consultant for:

Fidelity Exploration & Production Co.

Enc.

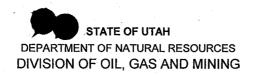
cc: Fidelity Exploration & Production Company - Denver, CO Fidelity Exploration & Production Company - Sheridan, WY

RECEIVED

JAN 1 4 2008

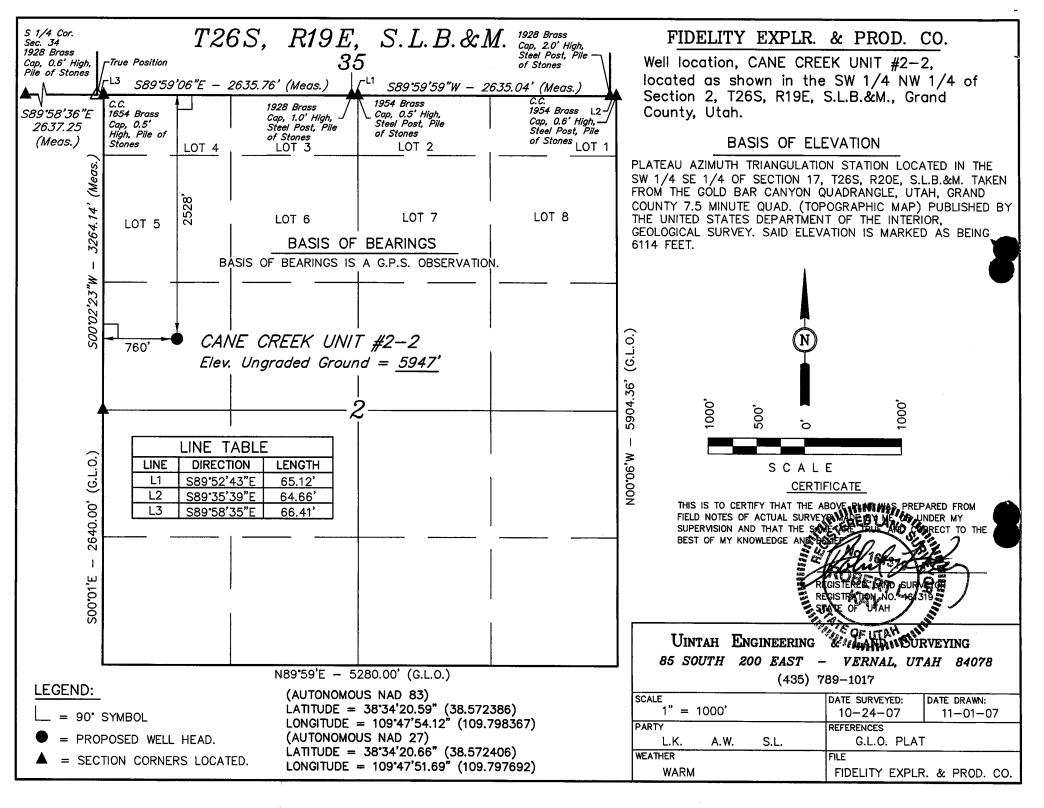
DIV. OF OIL, GAS & MINING

AMENDED REPORT (highlight changes)





	APPLICATION FOR	PERMIT	TO DRILL	5. MINERAL LEASE NO.: ML-40761	6. SURFACE:
1A. TYPE OF WOR	RK: DRILL ٌ REENTER 🗆	DEEPE	N□	7. IF INDIAN, ALLOTTEE OR	
			V	N/A 8. UNIT OF CA AGREEMENT N	JAME-
B. TYPE OF WEL	.L: OIL 🛣 GAS 🔲 OTHER	Sil	NGLE ZONE L MULTIPLE ZONE	Cane Creek Unit	
2. NAME OF OPER	RATOR:			9. WELL NAME and NUMBER	
Fidelity Ex	ploration & Production Company			Cane Creek Unit 2	-2
3. ADDRESS OF C			PHONE NUMBER:	10. FIELD AND POOL, OR WI	
1700 Linco	oln, Suite 2800, Denver, CO 80203		303/893-3133	Came Order Bir	flet
4. LOCATION OF	WELL (FOOTAGES) 604739 X 42	697984	38.572337	11. QTR/QTR, SECTION, 100 MERIDIAN:	VNSHIP, RANGE
AT SURFACE:	2528' FN	L and 760' F	·WL	Section 2, T26S - F	319F ~
AT PROPOSED F	PRODUCING ZONE: SW NW		-109. 797680	000110112,1200	
44 DISTANCE IN	MILES AND DIRECTION FROM NEAREST TOWN OR	DOCT OFFICE.	· · · · · · · · · · · · · · · · · · ·	40 COUNTY	LAC CTATE:
		POST OFFICE:		12. COUNTY:	13. STATE:
	mately 29 miles west of Moab, UT NEAREST PROPERTY OR LEASE LINE (FEET)	16. NUMB	ER OF ACRES IN LEASE:	Grand 17. NUMBER OF ACRES ASSIGNED TO	TO THIS WELL:
10. 510174102 10	760'	10. 1102	715.52	40 Acres: SV	
	NEAREST WELL (DRILLING, COMPLETED, OR	19. PROP	OSED DEPTH:	20. BOND DESCRIPTION:	
APPLIED FOR) ON THIS LEASE (FEET): 3900'		7,550'	Statewide Bond No	100017646
21. ELEVATIONS	(SHOW WHETHER DF, RT, GR, ETC.):	22. APPR	OXIMATE DATE WORK WILL START:	23. ESTIMATED DURATION:	. 190017040
	5947' GL		ASAP	25 Days	}
	DPOD	OSED CASI	NG AND CEMENTING PROG	ND A M	
24.		SETTING DEPTH	1		LUT
17-1/2"	CASING SIZE, GRADE, AND WEIGHT PER FOOT 13-3/8", H-40, 48#	1,500'	130 sx CBM Lite, 4.2 ft3/sk, 1	QUANTITY, YIELD, AND SLURRY WEIGHT	
12-1/4"	9-5/8", N-80, 40#	4,181'		eal System, 1.47 ft3/sk, 14	
8-3/4"	7", HCL-80, 29#	7,550'	···	emium, 1.49 ft3/sk, 16.8 pp	
			CON	IFIDENTIAL-TICH	THALE
			JOIN		7 11066
25.			ATTACHMENTS		
	LOWING ARE ATTACHED IN ACCORDANCE WITH T				
F-7			1 🗇		,
	AT OR MAP PREPARED BY LICENSED SURVEYOR (OR ENGINEER	COMPLETE DRILLING PL	_AN	
EVIDENC	CE OF DIVISION OF WATER RIGHTS APPROVAL FOR	RUSE OF WATER	FORM 5, IF OPERATOR I	IS PERSON OR COMPANY OTHER THA	N THE LEASE OWNER
AOENT. E	PermitCo Inc., 14421 County Road	10 Fort Lun	ton CO 80621	AGENT'S PHONE NO.	: 303/857-9999
AGENT: P	Venessa Langmacher	io, i oit Eup	·	nt for Fidelity Exploration & Pi	
NAME (PLEASE	PRINT) Vellessa Langinachei		INLE		- Caucasi Company
SIGNATURE _	Veneur Gangmas	les	DATE Jani	uary 10, 2008	
(This space for State	te use only)	Δnn	roved by the		
	11-		h Divis ion of	DE0=::-	_
API NUMBER ASS	IGNED: 43019-315(08)		as and Minny	RECEIVE)
				JAN 1 4 2008	2 4
		Date: A	2-77/K/	JM14 107 200()
(11/2001)		Date: <u>0</u>	(See instruction can Reverse Side)	DIV OF OUL GAS & MU	Alikio



CONFIDENTIAL - TIGHT HOLE

Cane Creek Unit #2-2 2528' FNL and 760' FWL SW NW Section 2, T26S - R19E Grand County, Utah

Prepared For:

Fidelity Exploration & Production Company

By:

PERMITCO INC. 14421 County Road 10 Fort Lupton, CO 80621 303/857-9999

Copies Sent To:

- 2 Utah Division of Oil, Gas & Mining SLC, UT
- 1 Utah Division of Oil, Gas & Mining Price, UT
- 1 Utah State Institutional Trust Lands Administration SLC, UT
- 2 Fidelity Exploration & Production Company Denver, CO
- 1 Fidelity Exploration & Production Company Sheridan, WY



Application for Permit to Fill
Fidelity Exploration & Production Company
Cane Creek Unit #2-2
2528' FNL and 760' FWL
SW NW Section 2, T26S - R19E
Grand County, Utah

Lease No. ML-40761

DRILLING PROGRAM

Page 1

1. Estimated Tops/Geologic Markers

The estimated tops of important geologic markers are as follows:

Formation	MD	Subsea
Wingate Sand	Surface	
Chinle	446'	5,526′
Moenkopi	804'	5,168'
Cutler	1,277'	4,695'
Honaker Trail	2,628'	3,344'
Paradox Formation	3,739'	2,233'
Cane Creek Shale	7,372'	-1,400'
TD	7,550'	-1,578'

2. <u>Estimated Depths and Names of Anticipated Water, Oil, Gas or Other Minerals Bearing</u> Formations

Substance	Formation	Depth
Brine	1 st Salt	3,962'
Oil	Cane Creek	7,372'

3. <u>Well Control Equipment & Testing Procedures</u>

Fidelity Exploration & Production Company's minimum specifications for pressure control equipment are as follows:

Ram Type: A 5,000# BOP will be used from surface to 1500'. It will then be replaced with a 10,000# BOP to TD.



Application for Permit to Fill
Fidelity Exploration & Production Company
Cane Creek Unit #2-2
2528' FNL and 760' FWL
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Grand County, Utah



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DRILLING PROGRAM

Page 2

Fidelity Exploration & Production Company will comply will all requirements pertaining to well control as listed in the Rule R649-3-7 of the Utah Division of Oil, Gas & Mining.

The size and rating of the BOP stacks are shown on the attached diagram.

4. <u>Casing Program</u>

The proposed casing program will be as follows:

Purpose	Depth	Hole Size	O.D.	Weight	Grade	Туре	New/Used
Surface	0'-1500'	17-1/2"	13-3/8"	48#	H-40	ST&C	New
Intermediate	0'-4,181'	12-1/4"	9-5/8"	40#	N-240	LT&C	New
Production	0'-7,550'	8-3/4"	7"	29#	HCL-80	LT&C	New

Casing design subject to revision based on geologic conditions encountered.

5. <u>Cement Program</u>

Surface	Type and Amount
0'-1,500'	Lead: 130 sx CBM Lite Type III, 1/4 pps Flocele, 10 pps Gilsonite, 2% CaCl2, 10.5 ppg, 4.2 ft3/sk. Tail: 500 sx Premium Cement, 1% CaCl2, 0.25 pps cellophane flake, 15.8 ppg, 1.16 ft3/sk.
Intermediate	Type and Amount
0'-4,181'	Lead: 600 sx Cement Elastiseal System 5 pps Silica Lite, 20% SSA1, 0.1% versaset, 1.5% FDP-C760-04, 14.35 ppg, 1.47 ft3/sk. Tail: 600 sx Cement Elastiseal System 5 pps Silica Lite, 20% SSA1, 0.1% versaset, 1.5% FDP-C760-04, 14.35 ppg, 1.47 ft3/sk.
Production	Type and Amount
3,500'-7,550'	600 sx One slurry premium cement, 30 pps hi-dense #4, 15% salt, 0.6% halad-413, 0.4% CFR3, 0.4% D-air 3000, 0.6% HR5, 0.4% Super CBL, 16.8 ppg, 1.49 ft3/sk.



Application for Permit to a lill Fidelity Exploration & Production Company Cane Creek Unit #2-2 2528' FNL and 760' FWL SW NW Section 2, T26S - R19E Grand County, Utah



Lease No. ML-40761

DRILLING PROGRAM

Page 3

6. **Drilling Fluids**

The proposed circulating mediums to be employed in drilling are as follows:

Interval	Mud Type	Mud Wt.	Visc.	F/L
0'-1,500'	Air Mist	8.4	30	N/C
1,500'-4,181'	Aerated Water	8.4	30	N/C
4,181'-7,550'	Oil Based Mud	15.5-15.6	50-65	5-6 cc

7. Testing, Logging and Coring

The anticipated type and amount of testing, logging and coring are as follows:

- a. No drill stem tests are anticipated.
- b. The logging program will consist of the following:
 - Run 1: Density Neutron Gamma Ray to be run from Surface to Intermediate.
 - Run 2: Density Neutron Gamma Ray Sonic to be run from Intermediate to TD.
- c. No cores are anticipated.

8. Anticipated Pressures and H₂S

a. Normal pressures and temperatures are expected in the objective formation and will be controlled with heavy mud. A maximum bottom hole pressure of 7000 psi is expected. A maximum bottom hole temperature of 122 degrees Fahrenheit is anticipated. Sour gas (H2S) is not anticipated.

9. Water Source

a. Water will be purchased from the City Yard in Moab, UT (Water Permit Systems #10003).



Application for Permit to ill Fidelity Exploration & Production Company Cane Creek Unit #2-2 2528' FNL and 760' FWL SW NW Section 2, T26S - R19E Grand County, Utah



Lease No. ML-40761

DRILLING PROGRAM
Page 4

10. Other Information

- a. Drilling is planned to commence immediately upon approval of this application.
- b. It is anticipated that the drilling of this well will take approximately 25 days.
- c. Lining of the reserve pit will be done if deemed necessary by the Utah Division of Oil, Gas and Minerals.
- d. At the end of drilling operations the location will be reclaimed and re-seeded as requested by the surface owner.

Surface Owner
State of Utah



FIDELITY E & P COMPANY

Utah State 2-2 SWNW, Section 2, T26S-R19E Grand County, Utah

Typical 10,000 psi WP BOP Schematic Arrangement RSRRA*G*

Rotating Head.

10,000 psi WP Annular Preventer

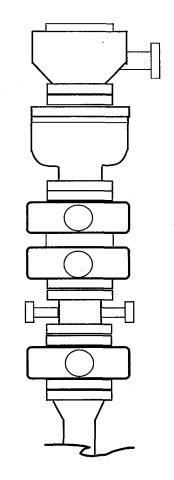
10,000 psi WP Double-Gate BOP Pipe Rams

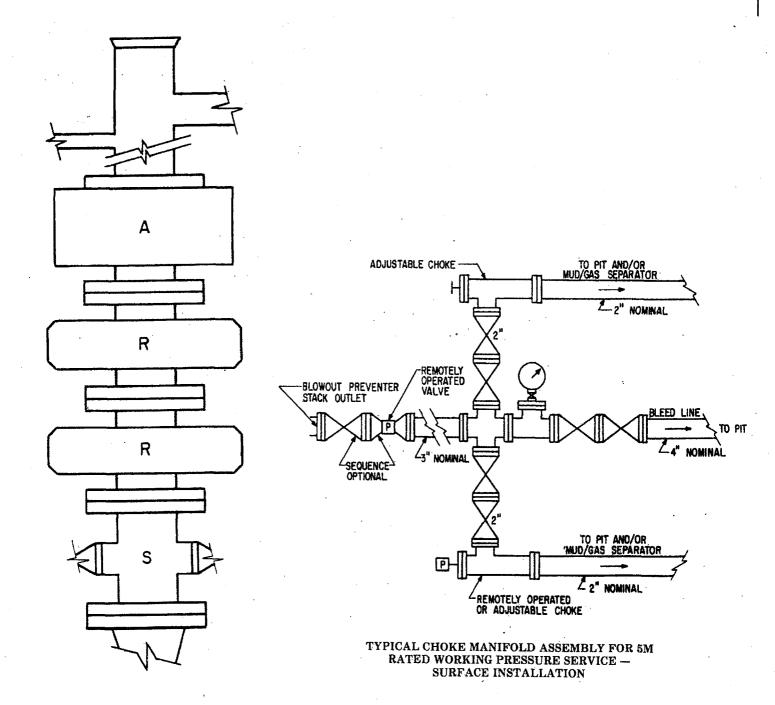
Blind Rams

10,000 psi WP Mud Cross

10,000 psi WP Single-Gate BOP Blind Rams

Casinghead





 $\begin{array}{c} \textbf{ARRANGEMENT SRRA} \\ \textbf{Double Ram Type Preventers, } \textbf{R}_{\textbf{d}}, \textbf{Optional.} \end{array}$

TYPICAL BLOWOUT PREVENTER
ARRANGEMENTS FOR 3M AND 5M RATED
WORKING PRESSURE SERVICE—
SURFACE INSTALLATION

FIDELITY EXPLR. & PROD. CO.

CANE CREEK UNIT #2-2

LOCATED IN GRAND COUNTY, UTAH **SECTION 2, T26S, R19E, S.L.B.&M.**

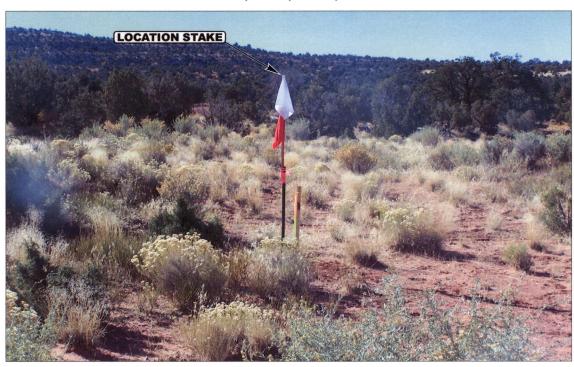


PHOTO: VIEW OF LOCATION STAKE

CAMERA ANGLE: SOUTHERLY

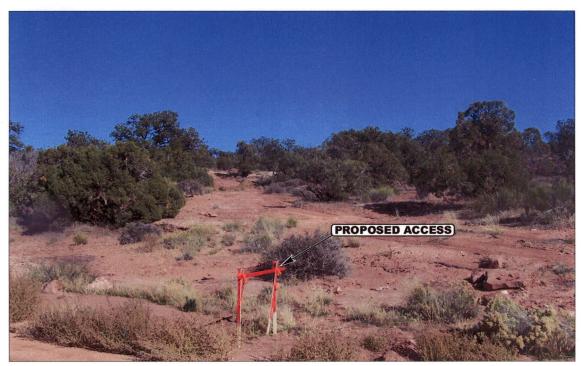


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: NORTHEASTERLY

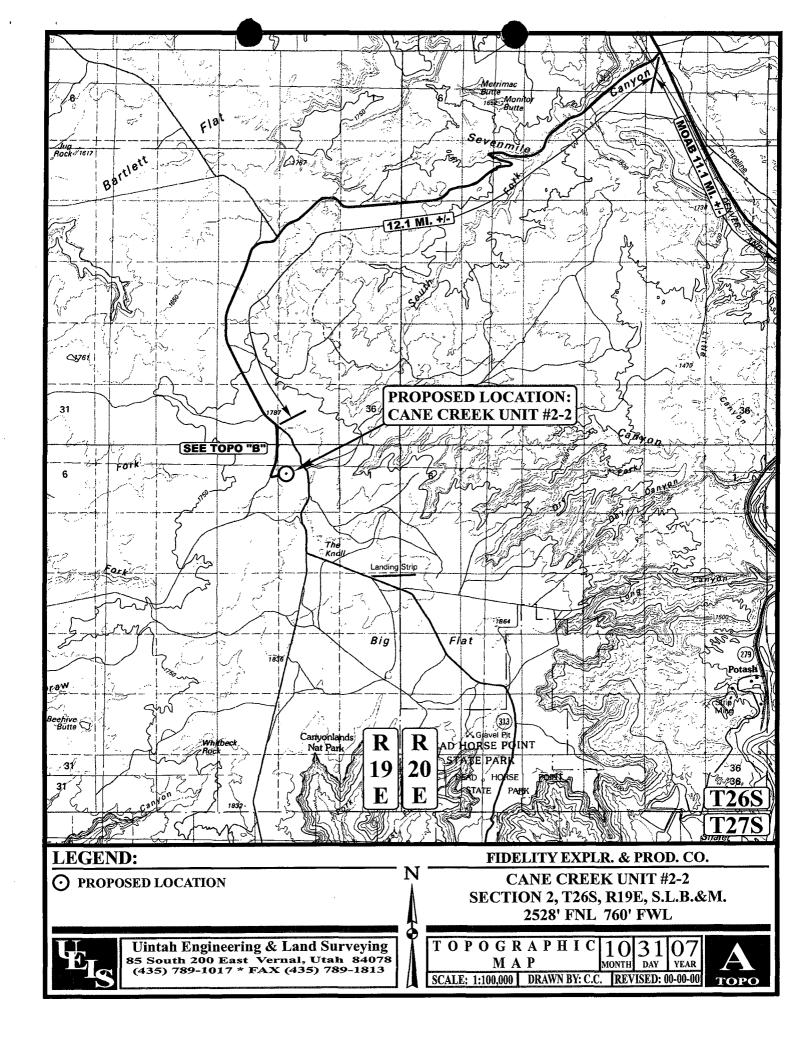


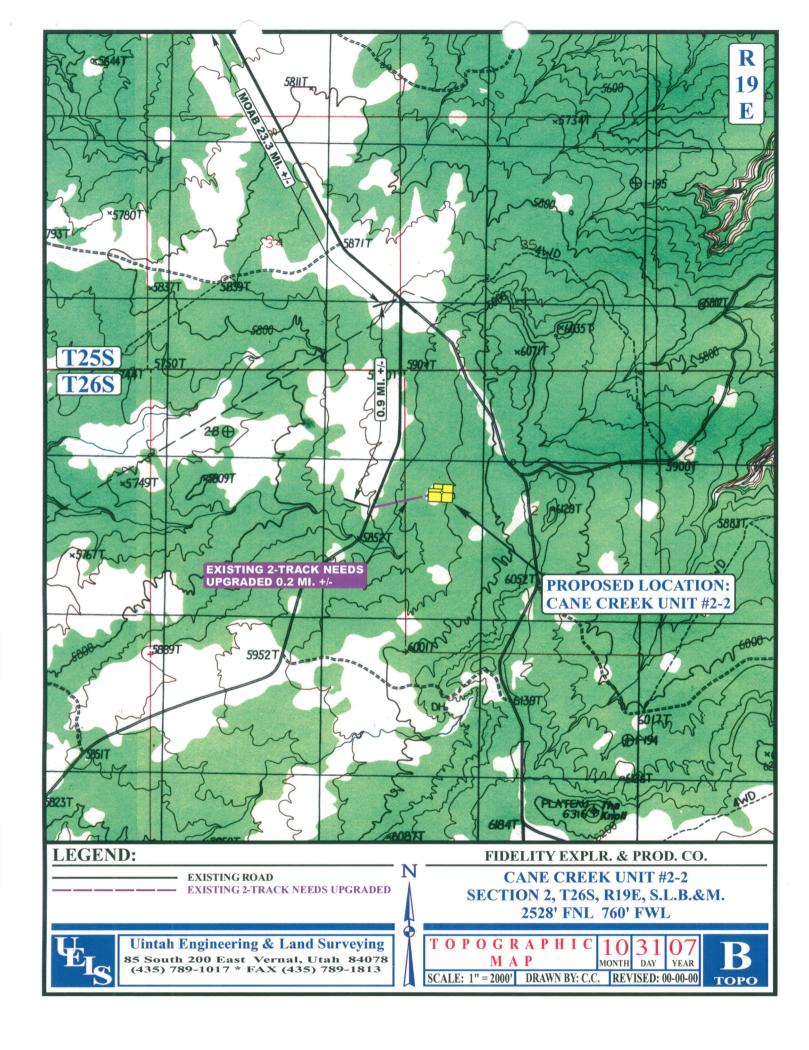
Uintah Engineering & Land Surveying S South 200 East Vernal, Utah 84078 435-789-1017 Vernal, Utah 84078 uels@uelsinc.com

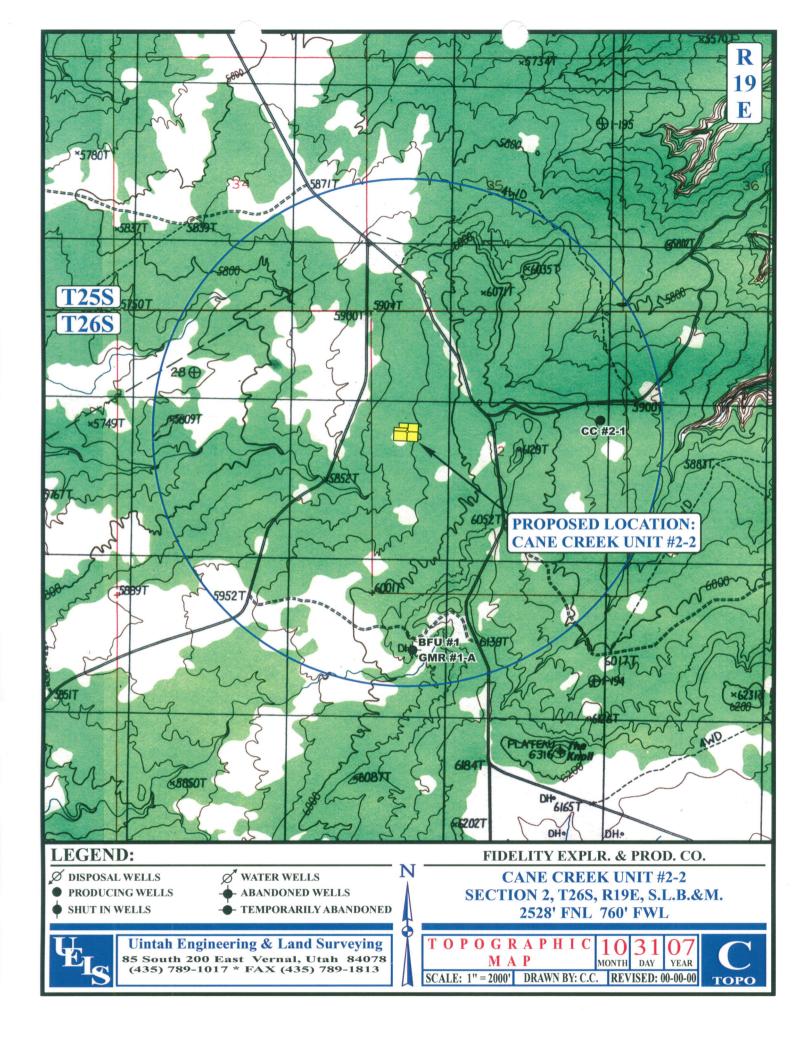
LOCATION PHOTOS

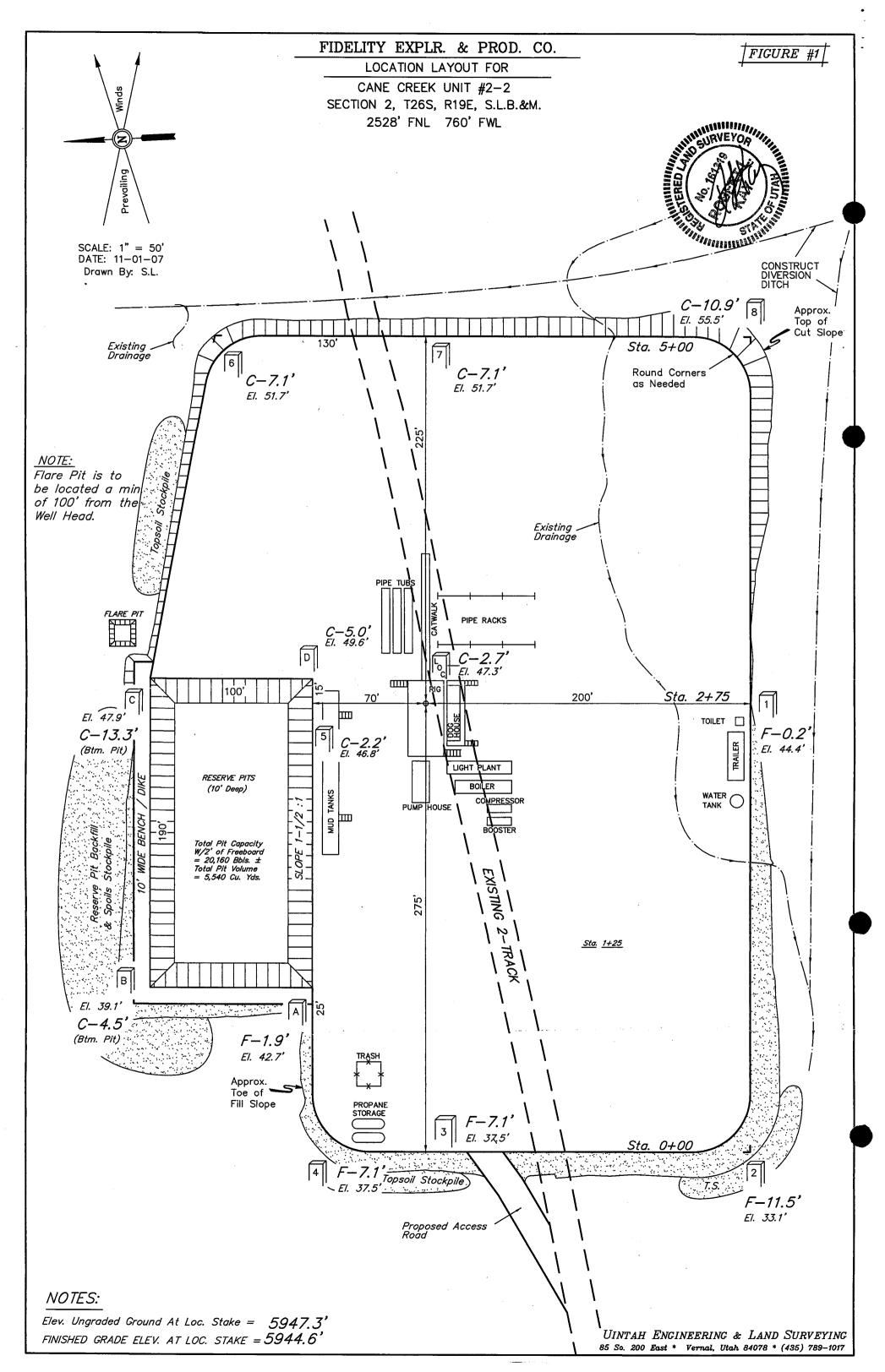
РНОТО

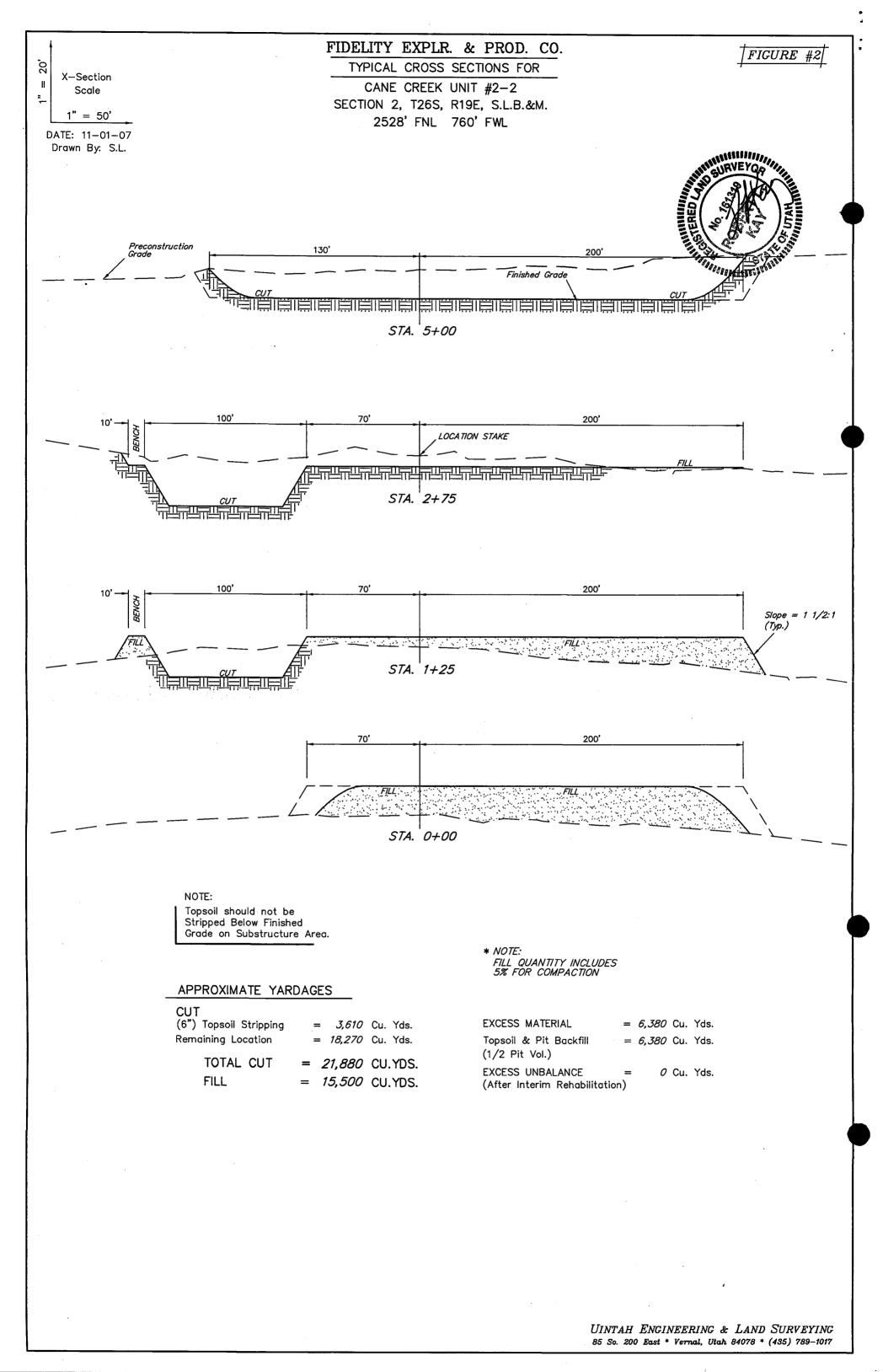
TAKEN BY: L.K. | DRAWN BY: C.C. | REVISED: 00-00-00



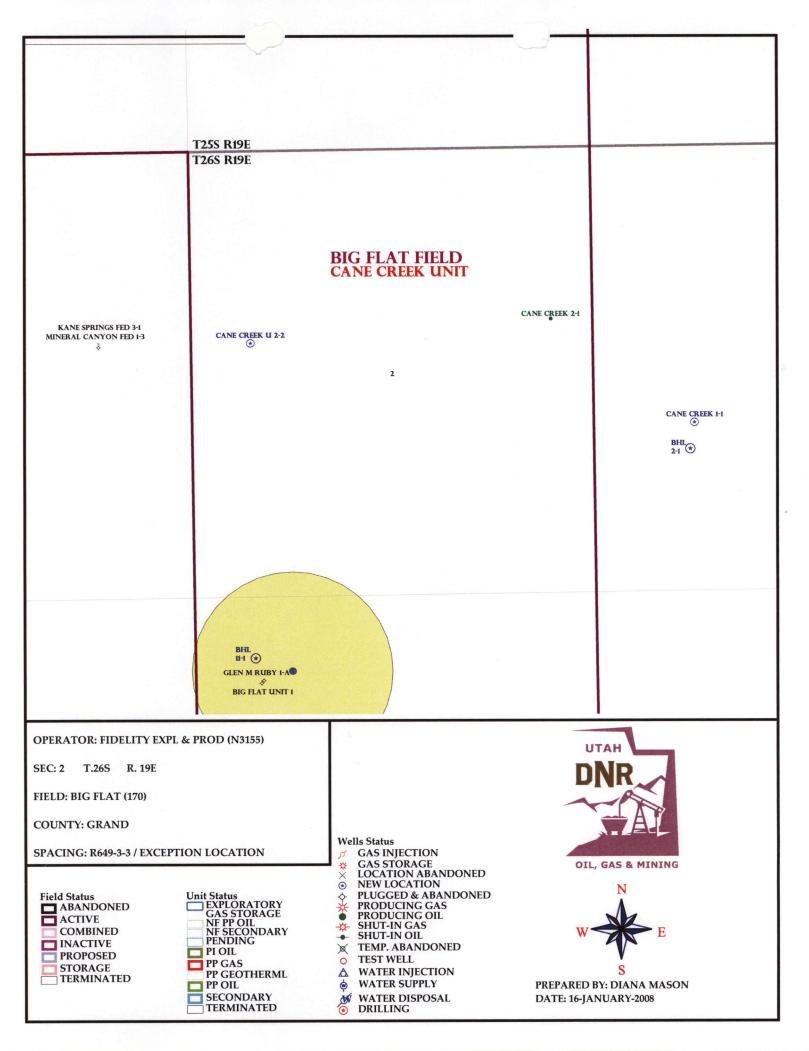








APD RECEIVED: 01/14/2008		API NO. ASSIG	GNED: 43-01	9-31568
WELL NAME: CANE CREEK U 2-2				
OPERATOR: FIDELITY E&P COMPANY (N3155)		PHONE NUMBER:	303-857-999	99
CONTACT: VENESSA LANGMACHER				
PROPOSED LOCATION:		INSPECT LOCATN	I BY: /	/
SWNW 02 260S 190E		Tech Review	Initials	Date
SURFACE: 2528 FNL 0760 FWL		Tech Keview	- Initials	
BOTTOM: 2528 FNL 0760 FWL		Engineering	DKO	2/8/08
COUNTY: GRAND LATITUDE: 38.57234 LONGITUDE: -109.7977		Geology		
UTM SURF EASTINGS: 604739 NORTHINGS: 4269	798	Surface		
FIELD NAME: BIG FLAT (170)			
LEASE TYPE: 3 - State LEASE NUMBER: ML-40761 SURFACE OWNER: 3 - State	1	PROPOSED FORMA COALBED METHAN		CR
RECEIVED AND/OR REVIEWED:	LOCATI	ON AND SITING:		
✓ Plat	R	649-2-3.		
Bond: Fed[] Ind[] Sta[] Fee[]				
(No. 190017646)		CANE CREEK		
Potash (Y/N)		649-3-2. Gener		
<u>⊢</u> Oil Shale 190-5 (B) or 190-3 or 190-13		iting: 460 From Q		Between Wells
Water Permit	R	649-3-3. Fleet	stion .	
(No. 10003) RDCC Review (Y/N)	D	rilling Unit		
(Date:)		Board Cause No:		
MLA Fee Surf Agreement (Y/N)	1	Eff Date: Siting:		
NAM Intent to Commingle (Y/N)		649-3-11. Dire	ectional Dri	111
	<u> </u>	,		
COMMENTS: Luds	bresite (1-23-08)	
· ·				
.0	a,			
STIPULATIONS: 1- Special	yshr	7	5	
Z- 31	ATEM	ENOT OF I	DASIS_	
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Application for Permit to Drill Statement of Basis

2/6/2008

Utah Division of Oil, Gas and Mining

Page 1

APD No

API WellNo

Status

Well Type OW

Surf Ownr

CBM

664

43-019-31568-00-00

Surface Owner-APD

S

No

Operator FIDELITY E&P COMPANY

Well Name CANE CREEK U 2-2

Unit

CANE CREEK

Field

BIG FLAT

Type of Work

Location

SWNW 2 26S 19E S 2528 FNL 760 FWL

GPS Coord (UTM) 604739E 4269798N

Geologic Statement of Basis

This proposed well would spud in a thin, sandy, moderately to very permeable soil that is developed on surficially exposed strata of the Kayenta Formation near the mapped axis of the Cane Creek Anticline. In this axial position it is reasonable to expect that jointing and attendant lost circulation may be encountered during drilling. The operator proposes to use an oil based drilling fluid system after setting intermediate casing well into the Paradox Salt. This should protect any fresh water resources in shallower aguifers, if they exist. There are no water rights filed for water supply wells within a mile of the location. At this location fresh water is most likely to encountered in the Wingate Sandstone Aquifer (poor permeability except where fractured). The sandstones of formations in the Cutler Group Aquifer could potentially contain a ground water resource but no fresh water has been documented in any of these in the area, even when they have been encountered relatively near the surface. The proposed casing and cementing program, if successful, should adequately protect any ground water resources encountered in the drilling of this well. The location is about 1 mile west of the head of Bull Canyon.

Chris Kierst

2/6/2008

APD Evaluator

Date / Time

Surface Statement of Basis

On-site evaluation completed January 23, 2008. In attendance: Charlie Harrison-Fidelity Exploration & Production, Bart Kettle-Division of Oil, Gas and Mining (DOGM), Ed Bonner-Trust Lands Administration (SITLA), Kyle Beagley-Division of Wildlife Recourses (DWR). Invited, but electing not to attend: Liz Thomas-Southern Utah Wilderness Alliance (SUWA).

In order to accommodate the proposed drilling program a large well pad is being approved for drilling operations. Following the completion of drilling operations well pad shall be reclaimed and re-seeded back to portions required to perform normal production activities.

Drainage on the eastern portions of the well pad will require diversion to prevent overland flows during intense rain events from over whelming reserve pit capacity.

Bart Kettle

1/23/2008

Onsite Evaluator

Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.
Surface	The reserve pit shall be fenced upon completion of drilling operations.
Surface	Drainages adjacent to the proposed pad shall be diverted around the location.
Surface	The well site shall be reclaimed back following the completion of drilling activities to only those portions required for normal production activities.

Utah Division of Oil, Gas and Mining

Operator

FIDELITY E&P COMPANY

Well Name

CANE CREEK U 2-2

API Number

43-019-31568-0

APD No 664

Field/Unit BIG FLAT

Location: 1/4,1/4 SWNW

Sec 2

Tw 26S

Rng 19E 2528 FNL 760 FWL

GPS Coord (UTM)

Surface Owner

Participants

Charlie Harrison-Fidelity Exploration & Production, Bart Kettle-Division of Oil, Gas and Mining (DOGM), Ed Bonner-Trust Lands Administration (SITLA), Kyle Beagley-Division of Wildlife Recourses (DWR).

Regional/Local Setting & Topography

Proposed project site is located ~29 mile west of Moab, in Grand County Utah. On a regional setting the well site is located in the northern portions of the Canyonlands Region of the Colorado Plateau. Topography in this area is generally a series of large sandy mesa's abruptly falling off into steep canyons comprised of alternating layers of sandstone and shale. Climatic conditions within the region are arid, and vegetation is typically sparse. The project site is located on the top of large mesa in the Deadhorse Point vicinity. Precipitation is classified as a 8-10" zone, and soils are dominated by unstable sand. Vegetation would best be described as mixed Pinion/Juniper woodlands and Black brush scrub communities. Water drainage is to the east, entering the Colorado River within 10 miles. No perennial water sources where observed in close proximity to the project site.

Surface Use Plan

Current Surface Use

Grazing

Wildlfe Habitat

New Road

Miles

Well Pad

Src Const Material

Surface Formation

0.25

Width 380

Length 500

Onsite

WINGT

Ancillary Facilities

Waste Management Plan Adequate? Y

Environmental Parameters

Affected Floodplains and/or Wetland N

Flora / Fauna

Flora:

Grass: Indian Rice Grass, cheatgrass, bottle brush squirrel tail, needle and thread.

Forbs: Russian thistle, birds beak, mustard spp, lomation spp.

Shrubs: Mormon tea, four wing salt brush, broom snakeweed, Wyoming sage, black brush, rabbit brush spp,

cliffrose, long flower snowberry.

Trees: Utah juniper, two needle pinion

Other: prickly pear cactus spp, Harriman's Yucca

Fauna: Host of small mamals, reptiles and migratory birds possible. Mule deer, coyote, bobcat and ravens year long residents.

Soil Type and Characteristics

Orange sandy loam

Erosion Issues Y

Soils erosive in nature when disturbed, no short term mitigation recommended

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required Y

Some drainage diversion will be required on the eastern portion of the well pad.

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? N Paleo Potental Observed? N Cultural Survey Run? Y Cultural Resources? N

Reserve Pit

Site-Specific Factors		Site 1	Ranking		
Distance to Groundwater (feet)	>200		0		
Distance to Surface Water (feet)	>1000		0		
Dist. Nearest Municipal Well (ft)	>5280		0		
Distance to Other Wells (feet)	>1320		0		
Native Soil Type	High permeability		20		
Fluid Type	Oil Base Mud Fluid		15		
Drill Cuttings	Salt or Detrimental		10		
Annual Precipitation (inches)	10 to 20		5		
Affected Populations	<10		0		
Presence Nearby Utility Conduits	Not Present		0		
		Final Score	50	1	Sensitivity Level

Characteristics / Requirements

Closed Loop Mud Required? N Liner Required? Y Liner Thickness 16 Pit Underlayment Required? N

Other Observations / Comments

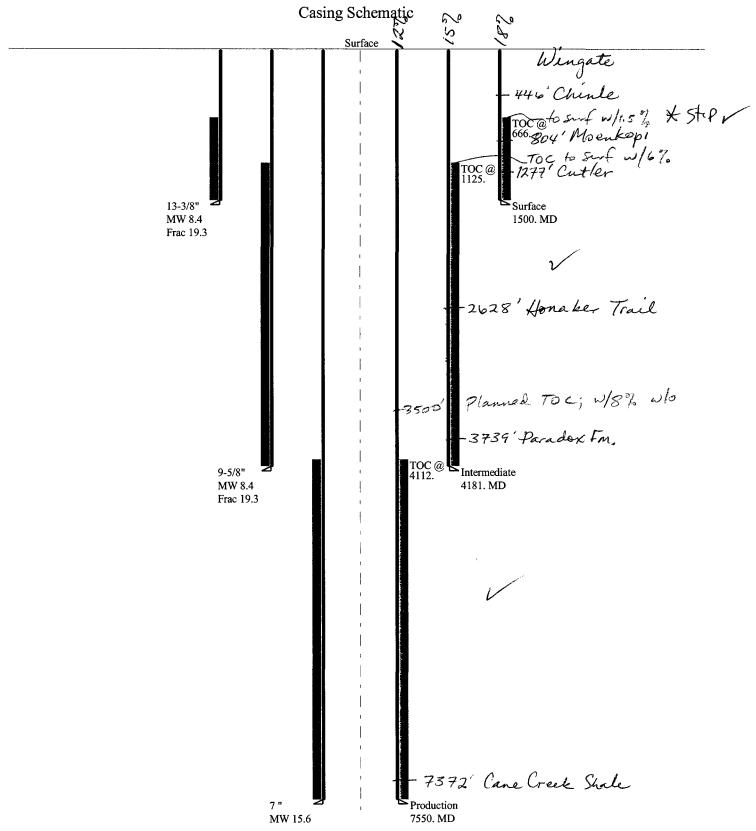
Access road has been changed from the submitted APD and will now enter the well pad from the east. New route requires an enchroachment from UDOT which requires graveling while drilling the length of UDOT's ROW. If well is a producing well paving the length of UDOT's ROW will be required.

SITLA requires designation of operator and surface bonding from Fidelity Exploration & Production. SITLA request that while stripping the well pad vegetation and topsoil be piled separately.

DWR list project site as suitable Desert Bighorn Sheep habitat, however on-site visit doesn't reveal indications of frequent use.

Bart Kettle 1/23/2008
Evaluator Date / Time

2008-02 Fidelity Cane Creek U 2-2



BOPE REVIEW

Well Name

Fidelity Cane Creek U 2-2 API 43-019-31568

INPUT				
Well Name	Fidelity Cane Creek	U 2-2 API 43-019-3	1568	
	String 1	String 2	String 3	String 4
Casing Size (")	13 3/8	9 5/8	7	
Setting Depth (TVD)	1500	4181	7550	
Previous Shoe Setting Depth (TVD)		1500	4181	
Max Mud Weight (ppg)	8.4	8.4	15.6	
BOPE Proposed (psi)	5000	10000	10000	
Casing Internal Yield (psi)	1730	5750	8160	
Operators Max Anticipated Pressure (psi)	7000			ppg

Calculations	String 1	13 3/8	11
Max BHP [psi]	.052*Setting Depth*MW =	655	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	475	YES
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	325	YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth) =	325	
Required Casing/BOPE Test		1211	psi
*Max Pressure Allowed @ Pi	revious Casing Shoe =	0	*Assumes 1psi/ft frac gradient

Calculations	String 2	9 5/8	***	
Max BHP [psi]	.052*Setting Depth*MW =	1826		
max bin [psi]	.002 Octaing Depart MVV =			For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	1325		Stripper head w/diverter
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	906		no expected pressures/flow
			*Can Full Expecte	ed Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth) =	1236		
Required Casing/BOPE Test	Pressure	4025	psi	
*Max Pressure Allowed @ Previous Casing Shoe =		1500		*Assumes 1psi/ft frac gradient

Calculations	String 3	7	"
Max BHP [psi]	.052*Setting Depth*MW =	6125	5
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) [psi]	Max BHP-(0.12*Setting Depth) =	5219	9 YES
MASP (Gas/Mud) [psi]	Max BHP-(0.22*Setting Depth) =	4464	4 YES
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP22*(Setting Depth - Previous Shoe Depth) =	5383	
Required Casing/BOPE Test		5712	2 psi 1
*Max Pressure Allowed @ Pr	evious Casing Shoe =	4181	1 psj // *Assumes 1psi/ft frac gradient

2008-02 Fidelity Cane Creek U 2-2

Operator:

Fidelity Exploration & Production Company

Surface

Project ID:

String type:

Mud weight:

43-019-31568

Location:

Collapse

Grand County

Design is based on evacuated pipe.

Design parameters: Minimum design factors:

8.400 ppg

Collapse:

Design factor 1.125 **Environment:**

H2S considered? Surface temperature:

No 75 °F

Bottom hole temperature: Temperature gradient:

96 °F

1.40 °F/100ft

Minimum section length: 1,500 ft

Burst:

Design factor

1.00 Cement top:

1.80 (J)

666 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

1,320 psi

0.120 psi/ft 1,500 psi

Tension: 8 Round STC:

Non-directional string.

No backup mud specified.

8 Round LTC: 1.80 (J) 1.60 (J) Buttress: Premium: 1.50 (J)

1.50 (B) Body yield:

Tension is based on buoyed weight. Neutral point: 1,316 ft

Re subsequent strings:

Next setting depth: Next mud weight: Next setting BHP:

4,181 ft 8.400 ppg 1,824 psi

Fracture mud wt: Fracture depth: Injection pressure: 19.250 ppg 1,500 ft 1,500 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	1500	13.375	48.00	H-40	ST&C	1500	1500	12.59	1322.7
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	655	740	1.131	1500	1730	1.15	63	322	5.10 J

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: 801-538-5357 FAX: 801-359-3940

Date: February 7,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 1500 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

2008-02 Fidelity Cane Creek U 2-2

Operator:

Fidelity Exploration & Production Company

String type:

Intermediate

Project ID:

43-019-31568

Location:

Grand County

Design parameters:

Collapse Mud weight:

8.400 ppg Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor

Environment:

H2S considered? Surface temperature: No 75 °F

Bottom hole temperature: 134 °F 1.40 °F/100ft Temperature gradient:

Minimum section length: 1,500 ft

Burst:

Design factor

1.00

2.000

Cement top:

1,125 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

3,261 psi 0.220 psi/ft

4,181 psi

Tension:

8 Round STC: 1.80 (J) 8 Round LTC: 1.80 (J) 1.60 (J) **Buttress:**

Premium: 1.50 (J) Body yield: 1.50 (B) Non-directional string.

No backup mud specified.

Tension is based on buoyed weight. Neutral point: 3,659 ft

Re subsequent strings:

Next setting depth: 7,550 ft Next mud weight: 15.600 ppg Next setting BHP: 6,118 psi Fracture mud wt: 19.250 ppg

Fracture depth: Injection pressure: 4,181 ft 4,181 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	4181	9.625	40.00	N-80	LT&C	4181	4181	8.75	1780
Run Seq	Collapse Load (psi) 1824	Collapse Strength (psi) 3090	Collapse Design Factor 1.694	Burst Load (psi) 4181	Burst Strength (psi) 5750	Burst Design Factor 1.38	Tension Load (Kips) 146	Tension Strength (Kips) 737	Tension Design Factor 5.04 J

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Minerals

Phone: 801-538-5357 FAX: 801-359-3940

Date: February 7,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 4181 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

2008-02 Fidelity Cane Creek U 2-2

Operator:

Fidelity Exploration & Production Company

String type:

Production

Design is based on evacuated pipe.

Project ID: 43-019-31568

Location:

Collapse

Grand County

Minimum design factors:

Collapse:

Design factor

Environment:

H2S considered? Surface temperature:

75 °F 181 °F Bottom hole temperature: 1.40 °F/100ft Temperature gradient:

Minimum section length: 1,500 ft

Burst:

Design factor

1.00

1.80 (J) 1.80 (J)

1.60 (J) 1.50 (J)

1.50 (B)

1.125

Cement top:

4,112 ft

No

Burst

Max anticipated surface

No backup mud specified.

pressure: Internal gradient: Calculated BHP

Design parameters:

Mud weight:

5,320 psi 0.220 psi/ft

17.800 ppg

6,981 psi

Tension:

8 Round STC:

8 Round LTC: **Buttress:** Premium:

Body yield:

Non-directional string.

Tension is based on buoyed weight. 5,516 ft Neutral point:

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	7550	` 7	29.00 ´	HCL-80	LT&C	7550	7550	6.059	1574.8
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	6981	9200	1.318	6981	8160	1.17	160	655	4.09 J

Prepared

Helen Sadik-Macdonald Div of Oil, Gas & Minerals Phone: 801-538-5357 FAX: 801-359-3940

Date: February 7,2008 Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 7550 ft, a mud weight of 17.8 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

2008-02 Fidelity Cane Creek U 2-2

Operator:

Fidelity Exploration & Production Company

String type:

Production

Project ID:

43-019-31568

Environment:

Location:

Grand County

Design parameters:

Collapse Mud weight:

15.600 ppg Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor

H2S considered?

Surface temperature:

No 75 °F

Bottom hole temperature: 181 °F 1.40 °F/100ft Temperature gradient:

Minimum section length: 1,500 ft

Burst:

Design factor

1.00

2.000

Cement top:

4,112 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

4,457 psi 0.220 psi/ft 6,118 psi

No backup mud specified.

Tension:

8 Round STC: 8 Round LTC: **Buttress:**

Premium: Body yield:

6118

1.60 (J) 1.50 (J) 1.50 (B)

1.33

167

1.80 (J)

1.80 (J)

Tension is based on buoyed weight. Neutral point: 5,767 ft

Non-directional string.

Run Segment Nominal End **True Vert** Measured Drift Internal Seq Length Size Weight Grade **Finish** Depth Depth Diameter Capacity (ft) (in) (lbs/ft) (ft) (ft) (in) (ft³) 1 7550 29.00 HCL-80 LT&C 7550 7550 6.059 1574.8 Run Collapse Collapse Collapse Burst Burst **Burst Tension Tension** Tension Strength Design Load Strength Design Load Strength Design Seq Load **Factor Factor** (Kips) **Factor** (psi) (psi) (psi) (psi) (Kips)

8160

Prepared

by:

Helen Sadik-Macdonald Div of Oil, Gas & Minerals

9200

1.504

Phone: 801-538-5357 FAX: 801-359-3940

Date: February 7,2008 Salt Lake City, Utah

655

3.92 J

Remarks:

1

6118

Collapse is based on a vertical depth of 7550 ft, a mud weight of 15.6 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

February 26, 2008

Memorandum

To: Assistant Field Office Manager Resources, Moab District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development Cane Creek Unit,

Grand and San Juan Counties, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following well is planned for calendar year 2008 within the Cane Creek Unit, Grand and San Juan Counties, Utah.

API# WELL NAME LOCATION

(Proposed PZ Cane Creek Shale)

43-019-31568 Cane Creek Unit 2-2 Sec 2 T26S R19E 2528 FNL 0760 FWL

This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc: File - Cane Creek Unit

Division of Oil Gas and Mining

Central Files
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:2-26-08

From:

Ed Bonner

To:

Mason, Diana

Date:

3/20/2008 1:24 PM

Subject:

Well Clearance

CC:

Curry, Kristine; Davis, Jim; Garrison, LaVonne; Hill, Brad; Jarvis, Dan

The following wells have been given cultural resources and paleontological resources clearance by the Trust Lands Administration:

Fidelity Exploration & Production

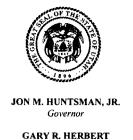
Cane Creek 2-2 (API 43 019 31568)

- * SITLA is requiring a paleontologist to be on site at the beginning of road and well location construction as recommended in the paleo report.
- * SITLA is requiring that the operator keep to the existing road alignment. Should archeological sites be encountered during the construction of the road and well location, work needs to cease and SITLA personnel notified. It is highly recommended that an archeologist be one site during the construction of road and well location construction.

NAE, LLC

CRU 16-14-2218 (API 43 019 31571)

If you have any questions regarding this matter please give me a call.



Lieutenant Governor



MICHAEL R. STYLER Executive Director

Division of Oil Gas and Mining

JOHN R. BAZA
Division Director

March 20, 2008

Fidelity Exploration & Production Company 1700 Lincoln, Ste. 2800 Denver, CO 80203

Re:

Cane Creek Unit 2-2 Well, 2528' FNL, 760' FWL, SW NW, Sec. 2, T. 26 South,

R. 19 East, Grand County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-019-31568.

Sincerely,

Gil Hunt

Associate Director

Hie 7/mt

pab Énclosures

cc:

Grand County Assessor

Bureau of Land Management, Moab Office

SITLA



Operator:		Fidelity Exploration & Production Company				
Well Name & Number_		Cane Creek Unit 2-2 43-019-31568				
API Number:	11. 14.11					
Lease:		ML-40761				
Location: SW NW	Sec. 2	T. 26 South	R . 19 Fast			

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

The operator is required to notify the Division of Oil, Gas and Mining of the following action during drilling of this well:

- 24 hours prior to cementing or testing casing contact Dan Jarvis
- 24 hours prior to testing blowout prevention equipment contact Dan Jarvis
- 24 hours prior to spudding the well contact Carol Daniels
- Within 24 hours of any emergency changes made to the approved drilling program contact Dustin Doucet
- Prior to commencing operations to plug and abandon the well contact Dan Jarvis

The operator is required to get approval from the Division of Oil, Gas and Mining before performing any of the following actions during the drilling of this well:

- Plugging and abandonment or significant plug back of this well contact Dustin Doucet
- Any changes to the approved drilling plan contact Dustin Doucet

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voice mail message if the person is not available to take the call):

Dan Jarvis at: (801) 538-5338 office (801) 942-0871 home
Carol Daniels at: (801) 538-5284 office

• Dustin Doucet at: (801) 538-5281 office (801) 733-0983 home

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Page 2 43-019-31568 March 20, 2008

- 4. Compliance with the State of Utah Antiquities Act forbids disturbance of archeological, historical, or paleontological remains. Should archeological, historical or paleontological remains be encountered during your operations, you are required to immediately suspend all operations and immediately inform the Trust Lands Administration and the Division of State History of the discovery of such remains.
- 5. Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis. (Copy Attached)
- 6. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.
- 7. Surface casing shall be cemented to the surface.

FORM 9 STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES 5. LEASE DESIGNATION AND SERIAL NUMBER: DIVISION OF OIL, GAS AND IM ML-40761 6 JE INDIAN ALLOTTEE OR TRIBE NAME-SUNDRY NOTICES AND REPORTS ON WELLS N/A 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill harizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. Cane Creek 8. WELL NAME and NUMBER: 1. TYPE OF WELL OIL WELL V GAS WELL OTHER Cane Creek Unit 2-2 9. API NUMBER: 2. NAME OF OPERATOR: 4301931568 Fidelity Exploration and Production Company PHONE NUMBER: 10. FIELD AND POOL, OR WILDCAT 3. ADDRESS OF OPERATOR: Big Flat WY , 82801 (307) 675-4924 2585 Heartland Drive Sheridan 4. LOCATION OF WELL FCOTAGES AT SURFACE: 2528 FNL 0760 FWL county: Grand QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWNW 2 26S 19E STATE: UTAH CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 11. TYPE OF ACTION TYPE OF SUBMISSION REPERFORATE CURRENT FORMATION DEEPEN ACIDIZE V NOTICE OF INTENT ALTER CASING FRACTURE TREAT SIDETRACK TO REPAIR WELL (Submit in Duplicate) Approximate date work will stad: CASING REPAIR NEW CONSTRUCTION TEMPORARILY ABANDON OPERATOR CHANGE TUBING REPAIR CHANGE TO PREVIOUS PLANS CHANGE TUBING PLUG AND ABANDON VENT OR FLARE SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK WATER DISPOSAL (Submit Original Form Only) CHANGE WELL STATUS PRODUCTION (START/RESUME) WATER SHUT-OFF Date of work completion: отнея: Extend Permit COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION 12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Fidelity would like to request an APD extension on the referenced well. Approved by the Utah Division of Oil, Gas and Mining CONFIDENTIAL

NAME (PLEASE PRINT). Stephanie Masters	TITLE	Operations Technician III
SIGNATURE JEWY MILES	DATE	2/24/2009

(This space for State use only)

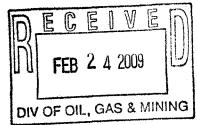
COPY SENT TO OPERATOR

(5/2000)

Date: 3.4.2009

Initials:

(See Instructions on Reverse Side)





Application for Permit to Drill Request for Permit Extension Validation (this form should accompany the Sundry Notice requesting permit extension)

API: 43-019-31568 Well Name: Cane Creek Unit 2-2 Location: 2528' FNL, and 760' FWL SWNW Sec2, T Company Permit Issued to: Fidelity Exploration Date Original Permit Issued: 3/20/2008	C26S, 19E and Production Company
The undersigned as owner with legal rights to dri above, hereby verifies that the information as sul approved application to drill, remains valid and d	bmitted in the previously
Following is a checklist of some items related to verified.	the application, which should be
If located on private land, has the ownership cha agreement been updated? Yes⊡No⊡	nged, if so, has the surface
Have any wells been drilled in the vicinity of the pathe spacing or siting requirements for this location	
Has there been any unit or other agreements put permitting or operation of this proposed well? Ye	
Have there been any changes to the access rout of-way, which could affect the proposed location?	
Has the approved source of water for drilling cha	nged? Yes□No⊠
Have there been any physical changes to the sur which will require a change in plans from what wa evaluation? Yes⊟No⊠	rface location or access route as discussed at the onsite
Is bonding still in place, which covers this propos	ed well? Yes⊠No□
Yal Market	2/24/2009
Signature	Date
Title: Operations Technician III	
Representing: Fidelity Exploration and Production Con	npany

CONFIDENTIAL

	STATE OF UTAH		FORM 9
	5.LEASE DESIGNATION AND SERIAL NUMBER: ML-40761		
SUNDF	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	sals to drill new wells, significantly deepe igged wells, or to drill horizontal laterals.		7.UNIT or CA AGREEMENT NAME: CANE CREEK
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: CANE CREEK U 2-2		
2. NAME OF OPERATOR: FIDELITY E&P COMPANY			9. API NUMBER: 43019315680000
3. ADDRESS OF OPERATOR: 2585 Heartland Drive , Sherid	an, WY, 82801 8543 30	PHONE NUMBER: 03 893-3133 Ext	9. FIELD and POOL or WILDCAT: BIG FLAT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2528 FNL 0760 FWL			COUNTY: GRAND
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SWNW Section: 02	rp, RANGE, MERIDIAN: 2 Township: 26.0S Range: 19.0E Meridia	n: S	STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPORT	, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION OMPLETED OPERATIONS. Clearly show all per to request an APD extension	n on the referenced well.	NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL ✓ APD EXTENSION OTHER:
NAME (PLEASE PRINT) Stephanie Masters	PHONE NUMBE	ER TITLE Operations Tech	
SIGNATURE N/A	307 675-4924	DATE 2/17/2010	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43019315680000

API: 43019315680000 **Well Name:** CANE CREEK U 2-2

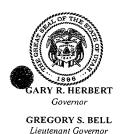
Location: 2528 FNL 0760 FWL QTR SWNW SEC 02 TWNP 260S RNG 190E MER S

Company Permit Issued to: FIDELITY E&P COMPANY

Date Original Permit Issued: 3/20/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

require revi	sion. Following is	a checklist of s	ome items related to the	ne application,	which should be verified.
	ated on private la ed? 📗 Yes 🌘		nership changed, if so, l	nas the surface	e agreement been
	any wells been d requirements for		nity of the proposed we	ell which would	l affect the spacing or
	nere been any un s proposed well?			t could affect t	he permitting or operation
	there been any cl the proposed loc			wnership, or ri	ghtof- way, which could
• Has th	ne approved sour	ce of water for o	drilling changed? 🔘 🔌	Yes 📵 No	
			to the surface location sed at the onsite evalua		
• Is bor	nding still in place	e, which covers	this proposed well? 📵		Approved by the Utah Division of Oil, Gas and Mining
Signature:	Stephanie Masters	Date:	2/17/2010		
Title:	Operations Tech	Representing:	FIDELITY E&P COMPANY		February 18, 2010
				7	00.00





MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

March 23, 2011

Fidelity E&P Company 2585 Heartland Drive Sheridan, WY 82801

Re:

APD Rescinded - Cane Creek U 2-2, Sec. 2, T.26S, R. 19E

Grand County, Utah API No. 43-019-31568

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on March 20, 2008. On March 2, 2009 and February 18, 2010 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective March 20, 2011.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

Environmental Scientist

cc:

Well File

SITLA, Ed Bonner

